We chose this 276-bp fragment to span the 11 bp insertion mutation (SEQ ID NO:4) as a nonhomologous sequence. The 276-bp DNA oligonucleotide was separated by gel electrophoresis and electroeluted from agarose, ethanol precipitated, and its concentration determined by absorbance at 260 nm. The 276-bp fragment was 5' end-labeled with ^{32}P and specifically D-looped with the pMc1lacXpA or pMC1lacpA plasmid DNA using recA as shown by agarose gel electrophoresis.—

Please replace paragraph beginning at page 59, line 18, with the following rewritten paragraph:

—Table 1
PCR Primers and Oligonucleotides

Oliganuclectide	DNA Strand	DNA Sequence
CF1	S	5'-GCAGAGTACCTGAAACAGGA (SEQ ID NO:7)
CF5	A	5'-CATTCACAGTAGCTTACCCA (SEQ ID NO:8)
CF6	A	5'-CCACATATCACTATATGCATGC (SEQ ID NO:9)
CF17	S	5'-GAGGGATTTGGGGAATTATTTG (SEQ ID NO:10)
OLITGO N	A	5'-CACCAAAGATGATATTTTC (SEQ ID NO:11)
OLIGO ΔF	A	5'-AACACCAAGATATTTTCTT (SEQ ID NO:12)—

Please insert the enclosed 3-page text entitled "SEQUENCE LISTING" into the specification.

REMARKS

The specification has been amended to include a Sequence Listing and proper reference to the sequences therein. Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

Entry of this amendment is respectfully requested. The amendments are made in adherence with 37 C.F.R. § 1.821-1.825. This amendment is accompanied by a floppy disk containing the above named sequence, SEQUENCE ID NUMBERS 1-12 in computer readable form, and a paper copy of the sequence information. The computer readable sequence listing was prepared through use of the software program "PatentIn" provided by the PTO. The information contained in the computer readable disk is identical to

that of the paper copy. This amendment contains no new matter. Applicant submits that this amendment, the accompanying computer readable sequence listing, and the paper copy thereof serve to place this application in a condition of adherence to the rules 37 C.F.R. § 1.821-1.825.

Please direct any calls in connection with this application to the undersigned at (415) 781-1989.

Respectfully submitted,
DORSEY & WHITNEY LLP

Dated: 1/11/03

BY: _____
Richard F. Trecartin, Reg. No. 31,801
Filed under 37 C.F.R. § 1.34(a)

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

Paragraph beginning at page 12, line 1, has been amended as follows:

—Fig. 5. PCR products and primers (SEQ ID NOS:1-3) from the lacZ (ß-galactosidase) gene sequence. The location of the 11 bp Xba linker (SEQ ID NO:4) is shown.—

Paragraph beginning at page 17, line 8, has been amended as follows:

—Figs. 20A and 20B. The organization of the mouse OTC gene. Sequence of cssDNA probes and PCR primers used in this study are indicated (SEQ ID NO:5). Sizes of the exons in basepairs are indicated. The relative position of PCR primers M9, M8 and M11 are shown. B) Map of plasmid pTAOTC1. A 250 bp fragment containing the normal OTC exon4 sequence and surrounding introns were cloned into the EcoRV site of pbluescript SK (+) (Stratagene).—

Paragraph beginning at page 17, line 13, has been amended as follows:

—Fig. 21. Sequence analysis of exon4 of the mouse OTC gene in founder mice. PCR amplification of genomic DNA from tail biopsies of a pool of all of the homozygous (spf-ash/spf-ash) females used as egg donors and each indicated individual founder mice were sequenced using cycle sequencing with the M11 primer (Cyclist kit, Stratagene). The DNA sequence surrounding the spf-ash locus (arrow) in the OTC gene is shown (SEQ ID NO:6).—

Paragraph beginning at page 51, line 1, has been amended as follows:

—The plasmid pMC1lacpA (8.4 kb) contains the strong polyoma virus promoter of transcription plus ATG placed in front of the lacZ gene. The polyadenylation signal from SV40 virus was placed in back of the lacZ gene. The plasmid vector was pIB130 from IBI (New Haven, CT). The mutant vector pMC1lacpA has a 11-bp insertion in the XbaI site consisting of the inserted sequence CTCTAGACGCG (see Figure 5; SEQ ID NO:4).—

Paragraph beginning at page 69, line 11, has been amended as follows:

—We synthesized two 20-bp primers (PCRα and PCRβ)for producing a 276-bp PCR product (see Figure 5; SEQ ID NOS:1-3) from the wild-type lacZ sequence for use as targeting polynucleotides. We chose this 276-bp fragment to span the 11 bp insertion mutation (SEQ ID NO:4) as a nonhomologous sequence. The 276-bp DNA oligonucleotide was separated by gel electrophoresis and electroeluted from agarose, ethanol precipitated, and its concentration determined by absorbance at 260 nm. The 276-bp fragment was 5' end-labeled with ^{32}P and specifically D-looped with the pMc1lacXpA or pMC1lacpA plasmid DNA using recA as shown by agarose gel electrophoresis.—

Paragraph beginning at page 59, line 18, has been amended as follows:

—Table 1
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Oliganuclectide	DNA Strand	DNA Sequence
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OLITGO N	A	5'-CACCAAAGATGATATTTTC (SEQ ID NO:11)
OLIGO ΔF	A	5'-AACACCAAGATATTTTCTT (SEQ ID NO:12)—

The enclosed 3-page text entitled "SEQUENCE LISTING" was inserted into the specification.